



(12) **United States Patent**  
**Watanabe et al.**

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(54) **MULTI-PIECE SOLID GOLF BALL**

(56) **References Cited**

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(57) **ABSTRACT**

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See application file for complete search history.

In a multi-piece solid golf ball having a core, an envelope layer, an intermediate layer, and a cover with a plurality of dimples thereon, the core is a two-layer core consisting of an inner core layer and an outer core layer each formed primarily of a base rubber, the envelope layer, the intermediate layer and the cover layer are each composed of at least one layer and formed primarily of a synthetic resin material, and the initial velocities and surface hardnesses of the core, the envelope layer-encased sphere and the intermediate layer-encased sphere are designed within specific ranges. This golf ball satisfies at a very high level the flight and control performances expected for use by professional golfers and skilled amateurs, has the ability to move forward on a straight path particularly on full shots, and also has an excellent scuff resistance.

**8 Claims, 1 Drawing Sheet**

